

# Vocabulary Three

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## Instructions

Take a look at the focus words below. Think about what each word means and how it is used. Then answer the questions after each word.

**Remember:** You *don't* have to understand every word in the example sentences.

**Focus words:** material, describe, design, velocity, provide

### I. material

1. The critical mass is defined to be the amount of fissionable **material** that is just large enough to recapture one neutron, on average, for every fission event.
2. One therefore has to be very careful in transferring data on film protectiveness from a pure **material** to an alloyed one.
3. Make sure you understand the **material** in this chapter.
4. Hot hardness is the ability of a **material** to retain its hardness at high temperatures.
5. The choice of **material** and production route will, ultimately, determine the price of the product.
6. This is why **materials** like ceramics and glasses are so brittle.

What do you think the word **material** means? Use a dictionary to help.

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Look at the sentences below. Do you think **material** is being used correctly?

Circle your answer.

1. You will need to study the **material** carefully in order to understand it well.  
                                  yes                               no
2. **Materials** such as cotton and silk are used a lot in the production of clothes.  
                                  yes                               no
3. It is difficult to manufacture a **material** that is 100% pure.  
                                  yes                               no
4. **Material** the product carefully.  
                                  yes                               no

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5. The **material** in the atmosphere contains many different gases.

yes                      no

6. Examine the **material** that you buy to make you shirt closely.

yes                      no

Write a sentence that uses the word **material**. Use the examples above to guide you.

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### II. describe

1. Draw an appropriate picture, and **describe** the basic idea of Newton's Method without using any formulas.
2. The vector field in part (a) might **describe** the velocity of the current in a stream at various depths.
3. To **describe** these situations, we need to generalize the concept of a graph.
4. Find the space angles that **describe** the direction of the force vector.
5. **Describe** how a very precise measurement can be inaccurate.
6. Chapters 5 and 6 **describe** the design of new databases.

What do you think the word **describe** means? Use a dictionary to help.

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Look at the sentences below. Do you think **describe** is being used correctly?

Circle your answer.

1. This method is often used to **describe** how gravity affects a falling object.

yes                      no

2. Draw a diagram to **describe** the process.

yes                      no

3. You can **describe** the book at the library on the 5<sup>th</sup> floor.

yes                      no

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4. Measure the volume carefully and **describe** the color of the liquid in your notes.

yes

no

5. The program can be used to **describe** algorithms into the correct order.

yes

no

6. This chapter will **describe** how we can use Euler's work to solve these equations.

yes

no

Write a sentence that uses the word **describe**. Use the examples above to guide you.

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### III. design

1. As we have said already, they are suitable only for the first step of the **design** project.
2. However, the **design** was revised at a late stage because it was felt that it would be difficult and expensive to make.
3. Then the final **design** of the advertisement, integrating words and pictures, is put together.
4. The **design** of modern parachutes is based on aerodynamic concepts to improve maneuverability.
5. The **design** of a programming language is shaped by the success and failure of earlier **designs**.
6. This type of line linkage analysis permits routing **design** and analysis.
7. A robust **design** is one in which the product's function and performance are relatively insensitive to variations in **design** and manufacturing

What do you think the word **design** means? Use a dictionary to help.

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What part of speech is **design**?

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Look at the sentences below. Do you think **design** is being used correctly?

Circle your answer.

1. In this project, you will need to **design** a process that will improve the production of vegetable oil.

yes

no

2. Civil engineers **design** anything from bridges to buildings.

yes

no

3. The **design** of the circuit was not very good because it became too hot after only a few minutes.

yes

no

4. The Earth's atmosphere **designs** many storms each year.

yes

no

5. Can you help me **design** my homework because I don't understand how to find the solution?

yes

no

6. The **design** was changed many times during the project.

yes

no

Write a sentence that uses the word **design**. Use the examples above to guide you.

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### IV. velocity

1. At low Reynolds numbers the coefficient of **velocity** may be quite small.
2. The most common flow measurements are pressure, rate of flow, and **velocity**.
3. The water from the outlet discharges into the atmosphere with a **velocity** of 50 m/s.
4. The inlet air **velocity** is  $v_i = \text{velocity is } v_i = 480 \text{ m/s}$ .
5. The particle need not necessarily be moving with constant **velocity**.
6. What is the **velocity** of a ball in miles per hour after an 800-ft drop ( $88 \text{ ft/s} = 60 \text{ mi/h}$ )?

What do you think the word **velocity** means? Use a dictionary to help.

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Look at the sentences below. Do you think **velocity** is being used correctly?

Circle your answer.

1. What is the **velocity** of the satellite after 15 seconds of acceleration?

yes                      no

2. The **velocity** and pressure are two important factors in the equation.

yes                      no

3. What if we **velocity** the object before we start?

yes                      no

4. The particle will move at a constant **velocity**.

yes                      no

5. The **velocity** air is one thing that you must consider in your calculations.

yes                      no

6. **Velocity** is not the same thing as speed in physics.

yes                      no

Write a sentence that uses the word **velocity**. Use the examples above to guide you.

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### V. provide

1. Its purpose is to **provide** a link between control volume ideas and system ideas.
2. These programs can work with the stored coordinates to **provide** a variety of possible designs.
3. Write a function that can be used to **provide** the position and velocity of the ball at any time  $t$ .
4. These assumptions, together with the application of physical laws, **provide** the mathematical model.
5. You will have to decide what additional controls and what display to **provide** for the users of the elevator.
6. In this chapter, we will **provide** an introduction to the differential equations that describe in detail the motion of fluids.

What do you think the word **provide** means? Use a dictionary to help.

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Look at the sentences below. Do you think **provide** is being used correctly?

Circle your answer.

1. The book will **provide** the vocabulary that you need.  
yes                          no
2. The program works to **provide** easy control of the graphics.  
yes                          no
3. Go to the store and **provide** some rice and bread.  
yes                          no
4. **Provide** the water bottle with water because it is empty.  
yes                          no
5. The teacher will decide what to do and **provide** the equipment for the project.  
yes                          no
6. I can't help you, but the doctor can **provide** the information that you need.  
yes                          no

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Write a sentence that uses the word **provide**. Use the examples above to guide you.

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**VII.** Choose **three** of the focus words and use them in a short paragraph.

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**VIII.** Look at the example sentences. What words come before and after each of the focus words? Put each word in a suitable category.

before the focus word	material	describe	design	velocity	provide
noun					
verb					
preposition				<b>of</b>	
article					
other word types					

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after the focus word	material	describe	design	velocity	provide
noun					
verb					
preposition					
other word types				<b>may</b>	

**Are there any patterns that you notice?** Click [here](#) to see more examples of the focus words in use.

**What does the pattern tell you about how the focus word is used?**



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**IX.** Do the focus words have any other parts of speech? Complete the table. Not all focus words have all parts of speech that are shown in the table.

part of speech	material	describe	design	velocity	provide
noun					
verb	materialize				
adjective					
adverb					